S.C. Department of Health and Environmental Control

Bureau of Air Quality
State Construction Permit

New-Indy Catawba LLC
5300 Cureton Ferry Road
Catawba, South Carolina 29704
York County

In accordance with the provisions of the Pollution Control Act, Sections 48-1-50(5), 48-1-100(A), and 48-1-110(a), the 1976 Code of Laws of South Carolina, as amended, and South Carolina Regulation 61-62, Air Pollution Control Regulations and Standards, the Bureau of Air Quality authorizes the construction of this facility and the equipment specified herein in accordance with the plans, specifications, and other information submitted in the construction permit application received on June 10, 2019, as amended. All official correspondence, plans, permit applications, and written statements are an integral part of the permit. Any false information or misrepresentation in the application for a construction permit may be grounds for permit revocation.

The construction and subsequent operation of this facility is subject to and conditioned upon the terms, limitations, standards, and schedules contained herein or as specified by this permit and its accompanying attachments.

Permit Number: **2440-0005-DF**
Issue Date: **7/23/2019**

Steve McCaslin, P. E., Director
Air Permitting Division
Bureau of Air Quality

RECORD OF REVISIONS	
Date	**Description of Changes**

A. PROJECT DESCRIPTION

Permission is hereby granted to convert the Kraft fiberline from manufacturing pulp for bleached paper grades to manufacturing pulp for unbleached or brown paper. This project includes converting the No. 3 Coated Paper Machine to manufacture linerboard and the Pulp Dryer (both in TV ID 06) to process unbleached pulp. The project also includes retiring the Bleach Plant (TV ID 03), Chlorine Dioxide Plant (TV ID 04), the TMP Process (TV ID 05), the No. 1 Paper Machine, No. 1 Coater, No. 2 Coater (all in TV ID 06), No. 1 Power Boiler (TV ID 08), and the Methanol Storage Tank (TV ID 10). The changes to each Title V (TV) emission unit are described below. Conditions pertaining to the retired equipment, will be removed from the TV operating permit upon inclusion of this construction permit.

B EQUIPMENT AND CONTROL DEVICES

TV Emission Unit ID	TV Emission Unit Description
01	Woodyard Area
02	*Modify* - Kraft Process - Kraft Pulp Mill
03	*Retire in place* - Kraft Process – Bleach Plant
04	*Retire in place* - Kraft Process – Chlorine Dioxide Plant
05	*Retire in place* - TMP Process
06	*Modify* - Paper Mill
07	*Modify* - Chemical Recovery
08	*Modify* - Utilities
09	Waste Treatment
10	*Retire in place* - Storage Tanks
12	*Modify* - HD Pulp Storage Tanks

TV ID 02, Kraft Process – Kraft Pulp Mill: The Kraft Pulp Mill currently produces virgin fiber suitable for brightening (bleaching) to manufacture lightweight coated paper and market pulp. The Kraft pulping equipment will be converted to produce virgin fiber for manufacturing unbleached linerboard. Virgin pulp yield will be increased by tripling the Kappa number from less than 30 for bleached pulp to over 90 for unbleached pulp. The higher Kappa number will produce more tons of virgin pulp using the same amount of raw materials (wood and cooking liquor). Also, the change to unbleached pulp will shorten the cook time in the continuous digester which will further increase virgin pulp production.

The six existing washers and associated filtrate tanks in the oxygen delignification and bleaching systems will be repurposed to create two parallel three-stage brownstock washers. New refiners and screw presses will be installed to facilitate processing the higher Kappa number pulp.

EQUIPMENT FOR TV EMISSION UNIT ID 02 – Kraft Process – Kraft Pulp Mill				
Equipment ID	**Equipment Description**	**Installation Date/ Modification Date**	**Control Device ID**	**Emission Point ID**
5210	*Modify* - Continuous Digester System: Digester Chip Bin, Continuous Digester, Chip Feed System, Blow Tank, Steam Economizer and Reboiler *Adding* – Pressure Refiners A and B	2003 / 2012 / 2019	5270, 2605, 3705	2610S1, 2610S2
5220	Turpentine Recovery System: Gas Cooler, Condenser, Decanter	1981	5260, 5260C, 5270, 2605, 3705	2610S1, 2610S2
5230	*Modify* - Pulp Washing System: Pressure Diffuser, Filtrate Tank *Adding* –3-Stage Brownstock Washer Lines with Filtrate Tanks (2 Lines in parallel, repurposed No. 1 Post O_2 Washer, No. 2 Post O_2 Washer, D0 Washer, D1 Washer, D2 Washer, Eop Washer), Brown Stock Liquor Surge Tank, Washed Stock Storage Tank (repurposed HD Tank)	2003/ 2019	5270, 2605, 3705	2610S1, 2610S2
5240	*Retire in Place* - Oxygen Delignification System: No. 1 O_2 Reactor, Blow Tube, No. 1 Post O_2 Washer, No. 1 Post O_2 Filtrate Tank, No. 2 O_2 Reactor, Blow Tube, No. 2 Post O_2 Washer, No. 2 Post O_2 Filtrate Tank, Post O_2 Surge Tank, No. 1B O_2 Reactor	2003 / 2012	5270, 2605, 3705	2610S1, 2610S2
5250	*Retire in Place* - Knotting and Screening System: HD Tank, Primary Knotters (2), Secondary Knotters (2), No. 1 Primary Screen, No. 2 Primary Screen, Secondary Screen, Tertiary Screen, Quaternary Screen, Cleaner, Shive Thickener, Screen Room Filtrate Tank, Screen Room Washer	2003 / 2006	5270, 2605, 3705	2610S1, 2610S2
5255	*Adding* – Pulp Refining and Washing: Deshive Refiners (2), Screw Presses (2), Screw Press Filtrate Tank, Filtrate Screen	2019	5270, 2605, 3705	2610S1, 2610S2

Also, the installation date for the Turpentine Recovery System will be changed to 1981 from 2003. Although the Turpentine Recovery System was part of the new fiberline permitted in 2003 under construction permit -CO, the facility has indicated this equipment was never replaced. Only a couple of pieces of equipment were removed. The corrected installation date has been included in this construction permit.

Retire in Place - TV ID 03, Kraft Process – Bleach Plant: This project eliminates the need for bleaching the virgin fiber. The existing bleaching reactors and towers will be retired in place. The bleach plant

washers and associated filtrate tanks will be repurposed to become brownstock washers in the Kraft Pulp Mill. The associated scrubber will also be retired.

Retire in Place - TV ID 04, Kraft Process – Chlorine Dioxide Plant: The Chlorine Dioxide Plant supplies the primary bleaching chemical chlorine dioxide to the Bleach Plant. This project will eliminate the need to produce the bleaching chemical. The Chlorine Dioxide Plant and scrubbers will be retired in place following the conversion of the Kraft Pulp Mill to unbleached virgin fiber.

Retire in Place - TV ID 05, TMP Process: The TMP process produces mechanical pulp for lightweight coated paper manufacturing. Linerboard and market pulp do not use TMP pulp. The TMP process, along with the Hydrogen Peroxide Bleaching System, will be retired in place following the conversion of No. 3 Paper Machine and the Pulp Dryer. The pulp storage tanks assigned to the TMP, in EU ID 12 and insignificant sources, will remain serviceable for storing Kraft pulp.

TV ID 06, Paper Mill: The No. 3 Paper Machine will be reconfigured to produce linerboard. The changes include modifications to the stock cleaning system, stock refining system, stock screening systems, whitewater system, headbox, forming wire, vacuum system and machine pulpers, adding a new dryer section, and replacing the winder. After the conversion, the whitewater methanol concentration is expected to be less than 50 ppmv. The Pulp Dryer will be reconfigured to support manufacturing unbleached market pulp. The changes include repurposing the stock cleaning, refining, and screening systems from the No. 1 Paper Machine. The No. 2 Paper Machine will remain operational and may be used to produce uncoated lightweight brown sheet. The two paper machines and pulp dryer will be operated according to market demands for the different products each produces.

The two-sided rod coating system, coating preparation system, coating tanks, air flotation dryer, infrared dryer, and hot oil heating system will be retired and removed. The No. 1 Paper Machine will be retired. The No. 1 Coater Dryer, No. 2 Coater Dryer, and starch system will be retired in place.

EQUIPMENT FOR TV EMISSION UNIT ID 06 – Paper Mill				
Equipment ID	**Equipment Description**	**Installation Date/ Modification Date**	**Control Device ID**	**Emission Point ID**
2000	*Retire in Place* - 171,850 ADT Paper/Year No. 1 Paper Machine: Cleaner System, Deculator System, Precondenser System, Vacuum Pump System, Screen System, Mix Tub, Headbox System, Forming Wire, Vacuum Blower, Vacuum Trench, Save-All System, Presses, Separators, Press Pulper, Dryer Systems, Dryer Pulper Calendar, Dry End Pulper, Reel, Slurry Mix Tanks, Mix Tanks	1962	None	2000
2005	*Retire in Place* - No. 1 Paper Machine Rereeler and Trim Pulper	1962	None	2000

EQUIPMENT FOR TV EMISSION UNIT ID 06 – Paper Mill				
Equipment ID	**Equipment Description**	**Installation Date/ Modification Date**	**Control Device ID**	**Emission Point ID**
2010	*Retire in Place* - No. 1 Coater Dryer, 48 million BTU/hr fired on Natural Gas, Propane, or Kerosene: Coater System, Coating Dryer, Screen/Filters, Reel, and Coated Broke Pulper	1962	None	2000
4600	*Modify* - No.2 Paper Machine: Cleaner System, Deculator System, Precondenser, Vacuum Pump System, Screen System, Headbox System Forming Wire, Vacuum Blower, Vacuum Trench, Save-All System, Press System, Press Pulper, Dryer Systems, Dryer Pulper, Calendar, Dry End Pulper, Reel, Slurry Mix Tanks, Mix Tanks	1986 / 2019	None	4600
4605	*Modify* - No. 2 Paper Machine Rereeler and Trim Pulper	1986 / 2019	None	4600
4610	*Retire in Place* - No. 2 Coater Dryer, 64 million BTU/hr fired on Natural Gas, Propane or Kerosene: Coating System, Coating Dryer, Screens/Filters, Reel, and Coated Broke Pulper	1986	None	4600
4100	*Modify* - No. 3 Paper Machine: Mixed Stock Chest, Stock Refining System, Cleaner System, Deculator System, Precondenser, Mixing Silo, Vacuum Pump System, Vacuum Trench, Screen System, Headbox System, Mix Eliminator, Vacuum Blowers, Forming Wire, Press System, Press Pulper, Dryer Systems, Economizer, Dry End Pulper, Steam Dryer, Reel, Reel Pulp, Winder, Trim Pulper *Retire and Remove* - Die Mix Tank, Filters, Two-sided Rod Coater System, Coating Preparation System, Coating Mix Tank, Coating Supply Tank, Calendars, Calendar Pulper	1968 / 2003/ 2019	None	4100
4110	*Retire and Remove* - 16 million BTU/hr Air Flotation Dryer equipped with Low NOx burners (as BACT), fired on Natural Gas, Propane, or Kerosene	2003	None	4110
4120	*Retire and Remove* - Infrared Dryer with total heat input of 22.6 million BTU/hr, fired on Natural Gas, Propane, or Kerosene	2003	None	4120
4130	*Retire and Remove* - 9.1 million BTU/hr Hot Oil Heating System, fired on Natural Gas, Propane, or Kerosene	2003	None	4130

EQUIPMENT FOR TV EMISSION UNIT ID 06 – Paper Mill				
Equipment ID	**Equipment Description**	**Installation Date/ Modification Date**	**Control Device ID**	**Emission Point ID**
2100	*Modify* - Pulp Dryer: Stock Cleaning, Refining and Screening System, Decker, Headbox System, Cylinder Mold, Hood Exhaust System, Vacuum System, Press System, Press Pulper, Dryers, Economizer, Dry End Pulper, Steam heated Booster Oven on dry end, Cutter, Stacker	1959 / 1999 / 2019	None	2100
9700	*Retire in Place* - Four - Starch Silos, Slurry Mix Tanks, Starch Cookers, Flash Tank, Mix Tanks	1962	B-2000	B-2000
9701A	*Retire in Place* - 1,400-gallon Slurry Tank	2002	None	9701A
9701B	*Retire in Place* - 1,400-gallon Slurry Tank	2002	None	9701B
9702	*Retire in Place* - Starch Cooker	2002	None	9702
9703	*Retire in Place* - Flash Tank	2002	None	9703
9704	*Retire in Place* - 2,900-gallon Paste Tank	2002	None	9704

CONTROL DEVICE(S) FOR TV EMISSION UNIT ID 06 – Paper Mill

Control Device ID	**Control Device Description**	**Installation Date/ Modification Date**	**Pollutant(s) Controlled**
B-2000	*Retire in Place* - Two - Starch Silo Bag Houses	1962	PM, PM_{10}

TV ID 07, Chemical Recovery: The No. 1 Evaporator Set will be modified to increase the evaporation rate to account for the reduction in the solids content of the weak black liquor from repurposed washers. The No. 1 evaporator set piping will be reconfigured to allow operation as a five-effect system. No modifications to the No. 2 and No. 3 Evaporator Sets, No. 2 and No. 3 Recovery Furnaces, No. 2 and No. 3 Smelt Dissolving Tanks, No. 2 Lime Kiln, or Causticizing Area are necessary to support the conversion to unbleached pulp production. Following the conversion to brown pulp, the Catawba Mill anticipates the cooking liquor and black liquor solids generation to remain below historical operating levels and existing equipment capacities. Only the modified equipment, in TV Emission Unit ID 07, is be listed below.

EQUIPMENT FOR TV EMISSION UNIT ID 07 – Chemical Recovery				
Equipment ID	**Equipment Description**	**Installation Date/ Modification Date**	**Control Device ID**	**Emission Point ID**
2400	*Modify* - No. 1 Multi-Effect Evaporator Set with concentrator	1959 / 2006, 2012 / 2019	5260, 5260C, 2605, 3705	2610S1, 2610S2

TV ID 08, Utilities: The proposed project is expected to reduce the overall mill steam demand due to the improved thermal efficiency of the Kraft Pulp Mill and retirement of the Bleach Plant. The reduction in mill steam demand will result in the retirement of the No. 1 Power Boiler (Equipment ID: 2550). The Combination Boilers No. 1 and No. 2 will continue to be used to control emissions from the facility. Only the retired boiler, from this emission unit, is shown below.

EQUIPMENT FOR TV EMISSION UNIT ID 08 - Utilities				
Equipment ID	**Equipment Description**	**Installation Date/ Modification Date**	**Control Device ID**	**Emission Point ID**
2550	*Retire in place* - 342–375 million BTU/hr Power Boiler, fired on natural gas, No. 6 fuel oil; 225,000 lb/hr maximum steaming rate on any fuel •342 million BTU/hr – No. 6 fuel oil; •375 million BTU/hr – natural gas	1959	none	2550S

TV ID 09, Waste Treatment: There are no physical changes planned to the waste treatment system. The volume of wastewater is expected to be reduced by approximately 50% following the conversion to unbleached pulp. The methanol loading in the foul condensate is also expected to be approximately one-half the current level following the conversion to unbleached pulp. Due to the changes described so far, the following equipment will also be impacted by this project.

EQUIPMENT FOR TV EMISSION UNIT ID 09 – Waste Treatment				
Equipment ID	**Equipment Description**	**Installation Date/ Modification Date**	**Control Device ID**	**Emission Point ID**
9800	180,000-gallon Foul Condensate Collection Tank (from NCG Systems)	1999	2605, 3705	2610S1, 2610S2
9801	800 gallon/minute Condensate Steam Stripper	2000	2605, 3705	2610S1, 2610S2

EQUIPMENT FOR TV EMISSION UNIT ID 09 – Waste Treatment				
Equipment ID	**Equipment Description**	**Installation Date/ Modification Date**	**Control Device ID**	**Emission Point ID**
9820	Stripper Off Gases (SOGs) Collection System	2001	2605, 3705	2610S1, 2610S2

CONTROL DEVICE(S) FOR EMISSION UNIT ID 09 – Waste Treatment			
Control Device ID	**Control Device Description**	**Installation Date/ Modification Date**	**Pollutant(s) Controlled**
2605	B&W No. 1 Combination Boiler	1959	VOC, TRS, HAP
3705	B&W No. 2 Combination Boiler	1968	VOC, TRS, HAP
9820	Stripper Off Gases (Collection)	2001	VOC, TRS, HAP
9801	Condensate Steam Stripper	2001	VOC, TRS, HAP

Retire in place - TV ID 10, Storage Tanks: The methanol tank (Equipment ID M10-223) located at the Chlorine Dioxide Plant (TV ID 04) will be retired from service following the conversion to unbleached pulp. This tank may be repurposed for another use in the future.

TV ID 12, HD Pulp Storage Tanks: The HD pulp storage tanks will store unbleached pulp following the conversion. The pumps and piping will be modified to better support unbleached pulp and re-direct pulp from the No. 1 Paper Machine to the remaining paper machines and the pulp dryer. The agitators inside these storage tanks will also be replaced or rebuilt. The No. 4 HD storage tank will be repurposed as an LD storage tank.

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
C.1	**Equipment ID:** All **Control Device ID:** All (S.C. Regulation 61-62.1, Section II.J.1.g) A copy of the Department issued construction and/or operating permit must be kept readily available at the facility at all times. The owner or operator shall maintain such operational records; make reports; install, use, and maintain monitoring equipment or methods; sample and analyze emissions or discharges in accordance with prescribed methods at locations, intervals, and procedures as the Department shall prescribe; and provide such other information as the Department reasonably may require. All records required to demonstrate compliance with the limits established under this permit shall be maintained on site for a period of at least 5 years from the date the record was generated and shall be made available to a Department representative upon request.

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
C.2	**Equipment ID:** 02, 07, 08, 09 **Control Device ID:** 2605, 2605C, 2610C1, 3705, 3705C, 3710C1, 5260, 5260C, 5270 The owner/operator shall inspect, calibrate, adjust, and maintain continuous monitoring systems, monitoring devices, and gauges in accordance with manufacturer's specifications or good engineering practices. The owner/operator shall maintain on file all measurements including continuous monitoring system or monitoring device performance measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required in a permanent form suitable for inspection by Department personnel. (S.C. Regulation 61-62.1, Section II.J.1.d) Sources required to have continuous emission monitors shall submit reports as specified in applicable parts of the permit, law, regulations, or standards.
C.3	**Equipment ID:** 02, 07, 08, 09 **Control Device ID:** 2605, 2605C, 2610C1, 3705, 3705C, 3710C1, 5260, 5260C, 5270 All gauges shall be readily accessible and easily read by operating personnel and Department personnel (i.e. on ground level or easily accessible roof level). Monitoring parameter readings (i.e., pressure drop readings, etc.) and inspection checks shall be maintained in logs (written or electronic), along with any corrective action taken when deviations occur. Each incidence of operation outside the operational ranges, including date and time, cause, and corrective action taken, shall be recorded and kept on site. Exceedance of operational range shall not be considered a violation of an emission limit of this permit, unless the exceedance is also accompanied by other information demonstrating that a violation of an emission limit has taken place. Reports of these incidences shall be submitted semiannually. If no incidences occurred during the reporting period then a letter shall be submitted to indicate such. Any alternative method for monitoring control device performance must be preapproved by the Department and shall be incorporated into the permit as set forth in S.C. Regulation 61-62.70.7.
C.4	**Emission Unit ID:** All **Equipment ID/Control Device ID:** All The owner or operator shall continue to operate under all applicable requirements, including emission limits and standards, testing, monitoring, record keeping, and reporting of the existing Title V Operating Permit (TV-2440-0005) that are not changed or contravened by this construction permit.

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
C.5	**Emission Unit ID:** 02, 07, 08, 09 **Equipment/Control Device ID:** 5210, 5230, 5255, 5100, 2605, 3705, 5260, 5270, 2605C, 5260C, 2610C1, 3705C, 3710C1, 9800, 9801, 9820 These sources are subject to New Source Performance Standards (NSPS), 40 CFR 60 Subpart A, General Conditions and Subpart BBa, Standards of Performance for Kraft Pulp Mill Affected Sources for Which Construction, Reconstruction, or Modification Commenced After May 23, 2013, and S.C. Regulation 61-62.60 Subparts A and BB, Standards of Performance for Kraft Pulp Mill Affected Sources for Which Construction, Reconstruction, or Modification Commenced After May 23, 2013, as applicable. These sources shall comply with all applicable requirements of these Subparts A and BB.
C.6	**Emission Unit ID:** 02, 07, 08, 09 This facility has processes subject to the provisions of S.C. Regulation 61-62.63 and 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants, Subparts A and S – National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry. Existing affected sources shall be in compliance with the requirements of these Subparts by the compliance date, unless otherwise noted. Any new affected sources shall comply with the requirements of these Subparts upon initial start-up unless otherwise noted.
C.7	**Emission Unit ID:** 01 **Equipment/Control Device ID:** 1300 (Correction to the TV process weight rate) The affected sources are subject to all applicable limits and requirements of the following regulation (reg.): • *SC Reg. 61-62.5, Standard No. 4 {Emissions from Process Industries (SC Std. 4)}* ((S.C. Regulation 61-62.5, Standard No. 4, Section VIII) Particulate matter (PM) emissions shall be limited to the rate specified by use of the following equations: 1) when process weight rates are less than or equal to 30 tons per hour: $E = 4.10P^{0.67}$ or 2) when process weight rates are greater than 30 tons per hour $E = 55.0P^{0.11} - 40$ where E = the allowable emission rate in pounds per hour, and P = process weight rate in tons per hour. For the purposes of compliance with this condition, the process boundaries are defined below. There are no control devices for the affected sources.

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

<table>
<tr><th>Condition Number</th><th>Conditions</th></tr>
<tr><td></td><td>
<table>
<tr><th colspan="2">TV ID 01</th></tr>
<tr><th>Process</th><th>Process Weight Rate (tons/hr)</th></tr>
<tr><td>Woodyard</td><td>393.3</td></tr>
</table>

The owner or operator shall perform visual emissions inspections (VE) on at least a semiannual basis to show reasonable assurance of continuing compliance with SC Std. 4 opacity and fugitive emission limitations. Logs shall be kept to record all visual inspections, noting color, duration, density (heavy or light), cause, and corrective action taken for any abnormal emissions. If a source did not operate during the required visual inspection time frame, the log shall indicate such. The owner/operator shall submit semiannual reports. The report shall include records of abnormal emissions, if any, and corrective action taken. If the unit did not operate during the semiannual period, the report shall state so.

Visual inspection means a qualitative observation of opacity during daylight hours. The observer does not need to be certified to conduct valid visual inspections. However, at a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions cause by background contrasts, ambient lighting, and observer position relative to lighting, wind, and the presence of uncombined water.</td></tr>
<tr><td>C.8</td><td>Emission Unit ID: 02, 06, 07
Equipment/Control Device ID: 5210, 5230, 5255, 4600, 4605, 4100, 2100, 2400

The affected sources are subject to all applicable limits and requirements of the following regulation (reg.):
• SC Reg. 61-62.5, Standard No. 4 {Emissions from Process Industries (SC Std. 4)}

(S.C. Regulation 61.62.5, Standard No. 4, Section IX) Where construction or modification began after December 31, 1985, emissions from these sources (including fugitive emissions) shall not exhibit an opacity greater than 20%, each.
<table>
<tr><th colspan="3">TV ID 06 – Paper Mill Opacity Limitations for Various Equipment</th></tr>
<tr><th>Equipment</th><th>Affected Source Description</th><th>Opacity Limit (%)</th></tr>
<tr><td>5210</td><td>Continuous Digester System</td><td>≤ 20</td></tr>
<tr><td>5230</td><td>Pulp Washing System</td><td>≤ 20</td></tr>
<tr><td>5255</td><td>Pulp Refining and Washing</td><td>≤ 20</td></tr>
<tr><td>4600</td><td>No. 2 Paper Machine</td><td>≤ 20</td></tr>
<tr><td>4605</td><td>No. 2 Paper Machine Rereeler and Trim Pulper</td><td>≤ 20</td></tr>
<tr><td>4100</td><td>No. 3 Paper Machine</td><td>≤ 20</td></tr>
</table>
</td></tr>
</table>

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

<table>
<tr><th>Condition Number</th><th>Conditions</th></tr>
<tr><td></td><td>
<table>
<tr><td>2100</td><td>Pulp Dryer</td><td>≤ 20</td></tr>
<tr><td>2400</td><td>No. 1 Multi-Effect Evaporator Set</td><td>≤ 20</td></tr>
</table>
≤ = Less than or equal to
</td></tr>
<tr><td>C.9</td><td>
Emission Unit ID: 06
Equipment/Control Device ID: 4600, 4605, 4100, 2100

The owner/operator shall perform a visual inspection on a semiannual basis shown in the table below during source operation. Logs shall be kept to record all visual inspections, noting color, duration, density (heavy or light), including cause and corrective action taken for any abnormal emissions. The owner/operator shall submit semiannual reports. The reports shall include records of abnormal emissions, if any, and corrective actions taken.

Visual inspection means a qualitative observation of opacity during daylight hours. The observer does not need to be certified to conduct valid visual inspections. However, at a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, and observer position relative to lighting, wind, and the presence of uncombined water.

<table>
<tr><th colspan="4">TV ID 06 – Paper Mill Opacity Monitoring for Various Equipment</th></tr>
<tr><th>Equip. No.</th><th>Pollutant</th><th>Equipment Description</th><th>VE Frequency</th></tr>
<tr><td>4600</td><td>Opacity</td><td>No. 2 Paper Machine</td><td>Semiannual</td></tr>
<tr><td>4605</td><td>Opacity</td><td>No. 2 Paper Machine Rereeler and Trim Pulper</td><td>Semiannual</td></tr>
<tr><td>4100</td><td>Opacity</td><td>No. 3 Paper Machine</td><td>Semiannual</td></tr>
<tr><td>2100</td><td>Opacity</td><td>Pulp Dryer</td><td>Semiannual</td></tr>
</table>
</td></tr>
<tr><td>C.10</td><td>
Emission Unit ID: 06
Equipment/Control Device ID: 4600, 4605, 4100, 2100

The affected sources are subject to all applicable limits and requirements of the following regulation (reg.):
• SC Reg. 61-62.5, Standard No. 4 {Emissions from Process Industries (SC Std. 4)}

(S.C. Regulation 61-62.5, Standard No. 4, Section VIII) Particulate matter emissions from a process shall be limited to the rate specified by use of the following equations:
1) when process weight rates are less than or equal to 30 tons per hour:
$E = (F)\ 4.10P^{0.67}$
or 2) when process weight rates are greater than 30 tons per hour:
</td></tr>
</table>

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

<table>
<tr><th>Condition Number</th><th>Conditions</th></tr>
<tr><td></td><td>$E = (F)\ 55.0P^{0.11} - 40$
where E = the allowable emission rate in pounds per hour, P = process weight rate in tons per hour, and F = effect factor from Table B in S.C. Regulation 61-62.5, Standard No. 4. For the purposes of compliance with this condition, the process boundaries are defined as follows: [SC Reg. 61-62.5, Std. 4, Sec. VIII(A) and VIII(B)]

<table>
<tr><th colspan="2">TV ID 06 – Paper Mill</th></tr>
<tr><th>Process/ Equipment IDs</th><th>PM Allowable (lb/hr)</th></tr>
<tr><td>Total of 4600, 4605, and 4610</td><td>39.9</td></tr>
<tr><td>4100</td><td>53.5</td></tr>
<tr><td>2100</td><td>41.0</td></tr>
</table>
</td></tr>
<tr><td>C.11</td><td>Emission Units: 01, 02, 06, 07, 08, 09

The owner/operator shall maintain production rate records, fuel usage records, and any other records necessary to determine VOC, SO_2, and TRS emissions from Emission Units 01, 02, 06, 07, 08, and 09. All emissions shall be calculated on an annual basis, in tons per year on a calendar year basis, for a period of ten years following resumption of regular operations to Emission Units 01, 02, 06, 07, 08, and 09.

If the annual emissions exceed the baseline actual emissions established within the construction permit application for this project by a significant amount (as defined in S.C. Regulation 62.5, Standard No. 7 (b) (49)) for any regulated NSR pollutant, the owner/operator shall submit a report to the Department within 60 days after the end of such year. The report shall contain the following:

1. The facility's name, address, and telephone number;

2. The annual emissions as calculated pursuant to S.C. Regulation 62.5, Standard No. 7 (r)(6)(iii); and

3. Any other information needed to make a compliance determination (e.g., an explanation as to why the emissions differ from the preconstruction projection).</td></tr>
<tr><td>C.12</td><td>Emission Unit, Equipment ID: 02, 5210; 02, 5230; 02, 5255; 07, 2400; 09, 9800; 09, 9801; 09, 9820
Control Device ID: 08, 2605, 3705

§60.280a Applicability and designation of affected facility.

(a) The provisions of this subpart are applicable to the following affected facilities in kraft pulp mills: digester system, brown stock washer system, multiple-effect evaporator system, recovery furnace,</td></tr>
</table>

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
	smelt dissolving tank, lime kiln and condensate stripper system. In pulp mills where kraft pulping is combined with neutral sulfite semichemical pulping, the provisions of this subpart are applicable when any portion of the material charged to an affected facility is produced by the kraft pulping operation. (b) Except as noted in §60.283a(a)(1)(iv), any facility under paragraph (a) of this section that commences construction, reconstruction or modification after May 23, 2013, is subject to the requirements of this subpart. Any facility under paragraph (a) of this section that commenced construction, reconstruction, or modification after September 24, 1976, and on or before May 23, 2013 is subject to the requirements of subpart BB of this part.
C.13	**Emission Unit, Equipment ID:** 02, 5210; 02, 5230; 02, 5255; 07, 2400; 09, 9800; 09, 9801; 09, 9820 **Control Device ID:** 08, 2605, 3705 **§60.283a Standard for total reduced sulfur (TRS).** (a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart must cause to be discharged into the atmosphere: (1) From any digester system, brown stock washer system, multiple-effect evaporator system, or condensate stripper system any gases which contain TRS in excess of 5 parts per million (ppm) by volume on a dry basis, corrected to 10-percent oxygen, unless one of the following conditions are met: (iii) The gases are collected in an LVHC or HVLC closed-vent system meeting the requirements of §63.450 and combusted with other waste gases in an incinerator or other device, or combusted in a lime kiln or recovery furnace not subject to the provisions of this subpart (or subpart BB of this part), and are subjected to a minimum temperature of 650 °C (1200 °F) for at least 0.5 second. (b) These standards apply at all times as specified in §§60.284a and 60.285a.
C.14	**Emission Unit, Equipment ID:** 02, 5210; 02, 5230; 02, 5255; 07, 2400; 09, 9800; 09, 9801; 09, 9820 **Control Device ID:** 08, 2605, 3705 **§60.284a Monitoring of emissions and operations.** (e) The Administrator will not consider periods of excess emissions reported under §60.288a(a) to be indicative of a violation of the standards provided the criteria in paragraphs (e)(1) and (2) of this section are met. (1) The percent of the total number of possible contiguous periods of excess emissions in the

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
	semiannual reporting period does not exceed: (vi) For closed-vent systems delivering gases to one of the control devices specified in §60.283a(a)(1)(i) through (iii) and (v), the time of excess emissions divided by the total process operating time in the semiannual reporting period does not exceed: (A) One percent for LVHC closed-vent systems; or (B) Four percent for HVLC closed-vent systems or for HVLC and LVHC closed-vent systems combined. (2) The Administrator determines that the affected facility, including air pollution control equipment, is maintained and operated in a manner which is consistent with good air pollution control practice for minimizing emissions during periods of excess emissions. (f) The procedures under §60.13 must be followed for installation, evaluation, and operation of the continuous monitoring systems required under this section. All continuous monitoring systems must be operated in accordance with the applicable procedures under Performance Specifications 1, 3, and 5 of appendix B of this part.
C.15	**Emission Unit, Equipment ID:** 02, 5210; 02, 5230; 02, 5255; 07, 2400; 09, 9800; 09, 9801; 09, 9820 **Control Device ID:** 08, 2605, 3705 **CAM TRS Monitoring for NSPS BBa Reduction:** The affected TRS gases shall be routed to the No. 1 Combination Boiler (2605) or No. 2 Combination Boiler (3705) and combusted for TRS reduction. The TRS gases are collected and routed to the boilers in the high volume low concentration (HVLC) closed vent collection system (5270). The TRS gases are subject to a minimum combustion temperature of 1200° F for at least 0.5 second. A caustic scrubber in the LVHC collection system prior to the combination boilers (5260C-LVHC System Caustic Scrubber) is used as part of the control to reduce TRS and sulfur dioxide (SO_2) from LVHC sources. The scrubber is not vented to the atmosphere; gaseous emissions from the caustic scrubber shall be vented to the LVHC system. ■Note: For streamlining purposes the monitoring for NSPS BB uses *Part 63* monitoring methods; however, this is a NSPS BB condition and not a *Part 63 (MACT)* condition. These sources are subject to *40 CFR 64, Compliance Assurance Monitoring (CAM)*, and shall comply with all applicable provisions. The Bureau considers the required use of boiler with heat input capacity greater than or equal to 44 megawatts (150 million British thermal units per hour) by introducing the HAP emission stream with the combustion air required by *NESHAP 40 CFR 63, Subparts A and S* (*MACT*

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

<table>
<tr><th>Condition Number</th><th>Conditions</th></tr>
<tr><td></td><td>
S), along with recording any bypass vent times and other TRS collection system losses to be presumptively acceptable CAM monitoring pursuant to 40 CFR 64.2(b)(1)(i) for reasonable assurance of compliance with the TRS limitations of NSPS BBa.

To meet the requirements of 40 CFR 64 for the affected sources, the indicator for TRS reduction will be the status of TRS venting or losses from the collection system of affected TRS sources required to be routed to boilers. The owner or operator will keep records of all venting, bypasses, and/or TRS losses that are exhausted to the atmosphere without being combusted in the boilers. The venting time period and source of the venting event shall be determined and recorded. As approved by the Department, the owner or operator shall continue to operate and maintain a flame failure system for the No. 1 Combination Boiler (2605) and No. 2 Combination Boiler (3705) to provide positive indication of vents when there is an absence of a flame in a boiler. The status of affected TRS streams shall be used to provide reasonable assurance of continuing compliance with NSPS BBa TRS reduction requirements.

A summary of the approved monitoring method, sampling frequency, monitor requirements, and data collection method is shown below.

<table>
<tr><th colspan="2">Kraft Pulp Mill Parameter Monitoring for Boilers 2605 and 3705 and HVLC Collection System 5270</th></tr>
<tr><td>●Control Device(s): Type Monitoring:
•Combination Boiler #1: 2605, Combination Boiler #2: 3705, and HVLC Collection System: 5270
•CAM/NSPS BB: TRS Vent status tracking
•Streamline monitoring [MACT S requirement used]</td><td>●Regulatory Requirement(s): Pollutant(s):
•NSPS BBa: TRS</td></tr>
<tr><td>●CAM Indicator(s):
• CAM/NSPS BBa: Vent status tracking
•Affected streams to source:
•By pass and vent valves status
•Rupture disks status</td><td>●Monitoring Frequency:
Averaging Time:
Frequency: Continuous - The duration and source of each TRS venting episode >5 minutes determined
Averaging: No averaging</td></tr>
<tr><td>●Monitor Operation and Maintenance:
•NSPS BBa: §60.284a; §60.13
•NSPS 40 CFR Part 60, Appendix B</td><td>●Data Collection Methods:
•Computer system/ manual record keeping</td></tr>
</table>

For streamlining purposes, a CAM excursion will have the same definition as an excess emission defined by NSPS BBa. To meet these requirements for the affected sources, the indicator for TRS reduction will be the status of TRS venting or losses from the collection system of affected TRS sources required to be routed to the boilers.
</td></tr>
</table>

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
	Operational ranges for the monitored parameters for the control options defined above have been established to indicate proper operation of the listed control devices and to provide a reasonable assurance of regulatory compliance. The operational ranges for the monitored parameters, as indicated above for the control options defined above, were derived from stack test data, vendor information, operational history, and visual inspections, which demonstrate the proper operation of the equipment. The facility shall maintain the established ranges, any range re-evaluations, and supporting documentation for these monitored parameters. Operating ranges may be updated following submittal to the Director of Air Permitting. Upon detecting an excursion, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing any startup, shutdown or malfunction period and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion (other than those caused by excused startup and shutdown conditions). For QA/QC purposes the owner or operator shall check the operation of the flame failure systems and the systems that indicate and/or record vents of TRS gases to the atmosphere on a monthly basis. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. A semiannual report for monitoring shall be submitted to the Bureau in accordance with the requirements in Part G of this permit. The report shall include, at a minimum, the information required under *SC Reg. 61-62.70.6(a)(3)(iii)* and the following information as applicable: • Summary information of the number, duration, source, and cause (including unknown cause, if applicable) of excursions, as applicable, and the corrective actions taken; excess emissions for NSPS BBa will also be reported. • Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero span or other daily calibration checks, if applicable) If required by the Department pursuant to *40 CFR 64.8*, a description of the actions taken to implement a Quality Improvement Plan (QIP) during the reporting period as specified in §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions occurring.

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
C.16	**Emission Unit, Equipment ID:** 02, 5210; 02, 5230; 02, 5255; 07, 2400; 09, 9800; 09, 9801; 09, 9820 **Control Device ID:** 08, 2605, 3705 **§60.286a Affirmative defense for violations of emission standards during malfunction.** In response to an action to enforce the standards set forth in §§60.282a and 60.283a, you may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at §60.2. Appropriate penalties may be assessed if you fail to meet your burden of proving all of the requirements in the affirmative defense. The affirmative defense must not be available for claims for injunctive relief. (a) *Assertion of affirmative defense.* To establish the affirmative defense in any action to enforce such a standard, you must timely meet the reporting requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that: (1) The violation: (i) Was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner; and (ii) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and (iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and (iv) Was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and (2) Repairs were made as expeditiously as possible when a violation occurred; and (3) The frequency, amount, and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and (4) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and (5) All possible steps were taken to minimize the impact of the violation on ambient air quality, the environment, and human health; and

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
	(6) All emission monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and (7) All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and (8) At all times, the affected source was operated in a manner consistent with good practices for minimizing emissions; and (9) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the violation resulting from the malfunction event at issue. The analysis must also specify, using best monitoring methods and engineering judgment, the amount of any emissions that were the result of the malfunction. (b) *Report.* The owner or operator seeking to assert an affirmative defense must submit a written report to the Administrator with all necessary supporting documentation that explains how it has met the requirements set forth in paragraph (a) of this section. This affirmative defense report must be included in the first periodic compliance, deviation report or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmative defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard.
C.17	**Emission Unit, Equipment ID:** 02, 5210; 02, 5230; 02, 5255; 07, 2400; 09, 9800; 09, 9801; 09, 9820 **Control Device ID:** 08, 2605, 3705 **§60.287a Recordkeeping.** (a) The owner or operator must maintain records of the performance evaluations of the continuous monitoring systems. (b) For each continuous monitoring system, the owner or operator must maintain records of the following information, as applicable: (2) Records of the concentration of TRS emissions on a dry basis and the percent of oxygen by volume on a dry basis in the gases discharged into the atmosphere from any lime kiln, recovery furnace, digester system, brown stock washer system, multiple-effect evaporator system, or condensate stripper system, except where the provisions of §60.283a(a)(1)(iii) or (iv) apply.

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Conditions
	(7) Records of excess emissions as defined in §60.284a(d). (c) For each malfunction, the owner or operator must maintain records of the following information: (1) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. (2) Records of actions taken during periods of malfunction to minimize emissions in accordance with §60.11(d), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
C.18	**Emission Unit, Equipment ID:** 02, 5210; 02, 5230; 02, 5255; 07, 2400; 09, 9800; 09, 9801; 09, 9820 **Control Device ID:** 08, 2605, 3705 **§60.288a Reporting.** (a) For the purpose of reports required under §60.7(c), any owner or operator subject to the provisions of this subpart must report semiannually periods of excess emissions defined in §60.284a(d). (d) If a malfunction occurred during the reporting period, you must submit a report that contains the following: (1) The number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. (2) A description of actions taken by an owner or operator during a malfunction of an affected facility to minimize emissions in accordance with §60.11(d), including actions taken to correct a malfunction.

D. NESHAP PERIODIC REPORTING SCHEDULE SUMMARY

NESHAP Part	NESHAP Subpart	Compliance Monitoring Report Submittal Frequency	Reporting Period	Report Due Date
63	S	Semiannual	January 1 – June 30 July 1 – December 31	July 30 January 30
63	ZZZZ	N/A	N/A	N/A

D. NESHAP PERIODIC REPORTING SCHEDULE SUMMARY

NESHAP Part	NESHAP Subpart	Compliance Monitoring Report Submittal Frequency	Reporting Period	Report Due Date
	(Emergency Engines see note 3 and 4)			
63	DDDDD (5D) (see note 5)	Semiannual	January 1 through June 30 July 1 through December 31	Postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period

1. This table summarizes only the periodic compliance reporting schedule. Additional reports may be required. See specific NESHAP Subpart for additional reporting requirements and associated schedule.
2. This reporting schedule does not supersede any other reporting requirements including but not limited to 40 CFR Part 60, 40 CFR Part 61, 40 CFR Part 63, and/or Title V. The MACT reporting schedule may be adjusted to coincide with the Title V reporting schedule with prior approval from the Department in accordance with 40 CFR Part 63.10.a.5. This request may be made 1 year after the compliance date for the associated MACT standard.
3. Facilities with emergency engines are not required to submit reports. Only facilities with non-emergency engines are required to submit semiannual reports.
4. Facilities with emergency engines shall comply with the operations limits specified in 40 CFR 63.6640(f).
5. This reporting schedule applies to the two Combination Boilers, TV Emission Unit 08, Equipment IDs 2605 and 3705.

E. NESHAP – CONDITIONS

Condition Number	Conditions
E.1	All NESHAP notifications and reports shall be sent to the Manager of the Air Toxics Section, South Carolina Department of Health and Environmental Control - Bureau of Air Quality.
E.2	All NESHAP notifications and the cover letter to periodic reports shall be sent to the United States Environmental Protection Agency (US EPA) at the following address or electronically as required by the specific subpart: **US EPA, Region 4** **Air, Pesticides and Toxics Management Division** **61 Forsyth Street SW** **Atlanta, GA 30303**

E. NESHAP – CONDITIONS

Condition Number	Conditions
S.C. Regulation 61-62.63 and 40 CFR 63, Subpart S	
E.3	This facility has processes subject to the provisions of S.C. Regulation 61-62.63 and 40 CFR 63, National Emission Standards for Hazardous Air Pollutants, Subparts A and S – National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry. Existing affected sources shall be in compliance with the requirements of these Subparts on the compliance date, unless otherwise noted. Any new affected sources shall comply with the requirements of these Subparts upon initial startup unless otherwise noted. The following are affected sources for Subpart S: • Continuous Digester System (TV ID 02, Equipment ID 5210) • Turpentine Recovery System (TV ID 02, Equipment ID 5220) • Pulp Washing System (TV ID 02, Equipment ID 5230) • Deshive Refiners (2) and Screw Presses (2) (TV ID 02, Equipment ID 5255) • No. 1 Multi-Effect Evaporator Set (TV ID 07, Equipment ID 2400) • No. 2 Multi-Effect Evaporator Set (TV ID 07, Equipment ID 2500) • No. 3 Multi-Effect Evaporator Set (TV ID 07, Equipment ID 5100) • No. 1 Combination Boiler (TV ID 08, Equipment ID 2605) • No. 2 Combination Boiler (TV ID 08, Equipment ID 3705) • LVHC Collection System (TV ID 08, Equipment ID 5260) • HVLC Collection System (TV ID 08, Equipment ID 5270) • Flame Arrestors, Mist Eliminators, Condensate Collection Tanks (TV ID 08, Equipment IDs 5261, 6271) • 180,000-gallon Condensate Collection Tank (TV ID 09, Equipment ID 9800) • 800 gallon/minute Condensate Steam Stripper (TV ID 09, Equipment ID 9801) • Stripper Off Gasses (SOG) Collection System (TV ID 09, Equipment ID 9820)
E.4	Upon completion of the project described in this construction permit, the facility will be subject to the unbleached requirements of 40 CFR 63, Subpart S.
E.5	This condition applies to the closed vent systems under 40 CFR 63, Subpart S: **Approved alternative monitoring to 40 CFR §63.453 Monitoring Requirements.** The owner or operator has been granted approval for alternative monitoring frequency for *40 CFR 63, Subpart S,* specifically inspections in 40 CFR 63.453(k) and (l). According to Applicability Determination Control #M120029, the inspections required by 40 CFR 63.453(k) and (l) and previously approved to be performed "every calendar month" shall be conducted with at least 21 days between monitoring events. (ADI #M120029, EPA letter dated August 25, 2010), (SC DHEC letter dated August 30, 2013) The owner or operator has elected to collect condensate in accordance with 63.446(c)(3) and treat the condensate in accordance with 63.446 (d) and (e)(4). To demonstrate compliance with these requirements the owner or operator shall calculate and record: 1) the daily mass of HAP collected

E. NESHAP – CONDITIONS

Condition Number	Conditions
	using the daily average condensate feed rate, the daily average pulp production, and the average HAP mass content of the condensate; 2) the daily mass of HAP removed using the daily average mass of HAP collected, the daily average pulp production, and the daily average effective steam ratio to determine HAP removal. The daily average effective steam ratio shall be determined by calculating the daily average effective steam; (total stripping column steam – steam to preheat condensate)/condensate feed rate. The daily effective steam ratio will be applied to the effective steam efficiency curve established or reestablished using characterization studies and performance testing conducted in accordance with §63.453(n). These values shall be established or reestablished during the most recent fifteen (15) day performance test conducted in accordance with §63.453(n). A fifteen (15) day rolling average of the daily HAP mass collected shall be calculated and recorded to determine compliance with the collection requirement of 7.2 lb HAP/ton ODP. A fifteen (15) day rolling average of the daily HAP mass removed shall be calculated and recorded to determine compliance with the collection requirement of 6.6 lb HAP/ton ODP. Excess emissions are defined as: 1. Each day during the semiannual reporting period when the fifteen (15) day rolling average of the mass of HAP collected is less than 7.2 lb HAP/ton ODP; 2. Each day during the semiannual reporting period when the fifteen (15) day rolling average of the mass of HAP removed is less than 6.6 lb HAP/ton ODP
S.C. Regulation 61-62.63 and 40 CFR 63, Subpart ZZZZ	
E.6	Emergency engines less than or equal to 150 kilowatt (kW) rated capacity, emergency engines greater than 150 kW rated capacity designated for emergency use only and operated a total of 500 hours per year or less for testing and maintenance and have a method to record the actual hours of use, such as an hour meter, and diesel engine driven emergency fire pumps that are operated a total of 500 hours per year or less for testing and maintenance and have a method to record the actual hours of use, such as an hour meter, have been determined to be exempt from construction permitting requirements in accordance with South Carolina Regulation 61-62.1. If present, these sources shall still comply with the requirements of all applicable regulations, including but not limited to the following: New Source Performance Standards (NSPS) 40 CFR 60 Subpart A (General Provisions); NSPS 40 CFR 60 Subpart IIII (Stationary Compression Ignition Internal Combustion Engines); NSPS 40 CFR 60 Subpart JJJJ (Stationary Spark Ignition Internal Combustion Engines); National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subpart A (General Provisions); and NESHAP 40 CFR 63 Subpart ZZZZ (Stationary Reciprocating Internal Combustion Engines). The following are affected sources for 40 CFR 63, Subpart ZZZZ: • 40 kW Emergency Generator, propane fired, installed in 2018 (Exempt List, Equipment ID 2906)

E. NESHAP – CONDITIONS

Condition Number	Conditions
	• Emergency Diesel Fire Pump #2, 175 hp, installed prior to 1995 (Exempt List, Equipment ID 2907) • Emergency No. 2 Lime Kiln Auxiliary Drive, 101 hp diesel fuel, installed in 1995 (Exempt List, Equipment ID 2908)
E.7	Affected sources: All Stationary IC Engines: This facility is subject to the provisions of 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants, Subparts A and NESHAP for Stationary Reciprocating Internal Combustion Engines. Existing affected sources shall comply with the applicable provisions by the compliance date specified in Subpart ZZZZ. Any new affected sources shall comply with the requirements of this Subpart upon initial start-up unless otherwise noted.
S.C. Regulation 61-62.63 and 40 CFR 63, Subpart DDDDD	
E.8	This facility has processes subject to the provisions of S.C. Regulation 61-62.63 and 40 CFR 63, National Emission Standards for Hazardous Air Pollutants, Subparts A and DDDDD – National Emission Standards for Hazardous Air Pollutants For Major Sources: Industrial, Commercial, And Institutional Boilers and Process Heaters. Existing affected sources shall be in compliance with the requirements of these Subparts by the compliance date, unless otherwise noted. Any new affected sources shall comply with the requirements of these Subparts upon initial start-up unless otherwise noted. See ATTACHMENT - S.C. Regulation 61-62.63 and 40 CFR 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants For Major Sources: Industrial, Commercial, And Institutional Boilers and Process Heaters. The following are affected sources for Subpart DDDDD: • No. 1 Combination Boiler (TV ID 08, Equipment ID 2605) • No. 2 Combination Boiler (TV ID 08, Equipment ID 3705)

F. AMBIENT AIR STANDARDS REQUIREMENTS

Condition Number	Conditions
F.1	Air dispersion modeling (or other method) has demonstrated that this facility's operation will not interfere with the attainment and maintenance of any state or federal ambient air standard. Any changes in the parameters used in this demonstration may require a review by the facility to determine continuing compliance with these standards. These potential changes include any decrease in stack height, decrease in stack velocity, increase in stack diameter, decrease in stack exit temperature, increase in building height or building additions, increase in emission rates, decrease in distance between stack and property line, changes in vertical stack orientation, and installation of a rain cap that impedes vertical flow. Parameters that are not required in the determination will not invalidate the demonstration if they are modified. The emission rates used in the determination are listed in Attachment - Emission Rates for Ambient Air Standards of this permit. Higher emission rates may be administratively incorporated into Attachment - Emission Rates for Ambient Air Standards of this permit provided a demonstration using these higher emission rates shows the attainment and

F. AMBIENT AIR STANDARDS REQUIREMENTS

Condition Number	Conditions
	maintenance of any state or federal ambient air quality standard or with any other applicable requirement. Variations from the input parameters in the demonstration shall not constitute a violation unless the maximum allowable ambient concentrations identified in the standard are exceeded. The owner/operator shall maintain this facility at or below the emission rates as listed in Attachment - Emission Rates for Ambient Air Standards, not to exceed the pollutant limitations of this permit. Should the facility wish to increase the emission rates listed in Attachment - Emission Rates for Ambient Air Standards, not to exceed the pollutant limitations in the body of this permit, it may do so by the administrative process specified above. This is a State Only enforceable requirement.

G. PERIODIC REPORTING SCHEDULE

Compliance Monitoring Report Submittal Frequency	Reporting Period (Begins on the startup date of the source)	Report Due Date
Quarterly	January-March April-June July-September October-December	April 30 July 30 October 30 January 30
Semiannual	January-June April-September July-December October-March	July 30 October 30 January 30 April 30
Annual	January-December April-March July-June October-September	January 30 April 30 July 30 October 30
Note: This reporting schedule does not supersede any federal reporting requirements including but not limited to 40 CFR Part 60, 40 CFR Part 61, and 40 CFR Part 63. All federal reports must meet the reporting time frames specified in the federal standard unless the Department or EPA approves a change.		

H. REPORTING CONDITIONS

Condition Number	Conditions
H.1	Reporting required in this permit, shall be submitted in a timely manner as directed in the Periodic Reporting Schedule of this permit.
H.2	All reports and notifications required under this permit shall be submitted to the person indicated in

H. REPORTING CONDITIONS

Condition Number	Conditions
	the specific condition at the following address: **2600 Bull Street** **Columbia, SC 29201** The contact information for the local Environmental Affairs Regional office can be found at: **http://www.scdhec.gov**
H.3	The owner/operator shall submit written notification to the Director of Air Permitting of the date construction is commenced, postmarked within 30 days after such date.
H.4	Unless elsewhere specified within this permit, all reports required under this permit shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality.
H.5	(S.C. Regulation 61-62.1, Section II.J.1.c) For sources not required to have continuous emission monitors, any malfunction of air pollution control equipment or system, process upset, or other equipment failure which results in discharges of air contaminants lasting for one (1) hour or more and which are greater than those discharges described for normal operation in the permit application, shall be reported to the Department within twenty-four (24) hours after the beginning of the occurrence and a written report shall be submitted to the Department within thirty (30) days. The written report shall include, at a minimum, the following: 1. The identity of the stack and/or emission point where the excess emissions occurred; 2. The magnitude of excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the excess emissions; 3. The time and duration of excess emissions; 4. The identity of the equipment causing the excess emissions; 5. The nature and cause of such excess emissions; 6. The steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction; 7. The steps taken to limit the excess emissions; and, 8. Documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated, to the maximum extent practicable, in a manner consistent with good practice for minimizing emissions. The initial twenty-four (24) hour notification should be made to the Department's local Environmental Affairs Regional office. The written report should be sent to the Manager of the Technical Management Section, Bureau of Air Quality and the local Environmental Affairs Regional office.

I. PERMIT EXPIRATION AND EXTENSION

Condition Number	Conditions
I.1	(S.C. Regulation 61-62.1, Section II.A.4 and S.C. Regulation 61-62.1, Section II.J.1.f) Approval to construct shall become invalid if construction: a. is not commenced within 18 months after receipt of such approval; b. is discontinued for a period of 18 months or more; or c. is not completed within a reasonable time as deemed by the Department. The Department may extend the construction permit for an additional 18-month period upon a satisfactory showing that an extension is justified. This request must be made prior to the permit expiration. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within eighteen (18) months of the projected and approved commencement date.
I.2	This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.

J. PERMIT TO OPERATE

Condition Number	Conditions
J.1	(S.C. Regulation 61-62.1 Section II.F.2) The owner/operator or professional engineer in charge of the project shall certify that, to the best of his/her knowledge and belief and as a result of periodic observation during construction, the construction under application has been completed in accordance with the specifications agreed upon in the construction permit issued by the Department.
J.2	If construction is certified as provided in S.C. Regulation 61-62.1 Section II.F.2, the owner or operator, may operate the source in compliance with the terms and conditions of the construction permit until the operating permit is issued by the Department.
J.3	If construction is not built as specified in the permit application and associated construction permit(s), the owner/operator must submit to the Department a complete description of modifications that are at variance with the documentation of the construction permitting determination prior to commencing operation. Construction variances that would trigger additional requirements that have not been addressed prior to start of operation shall be considered construction without a permit.
J.4	(S.C. Regulations 61-62.1 Section II.F.3 and 61-62.70.7) The owner or operator shall submit a written request to the Director of Air Permitting for a new or revised operating permit to cover any new or altered source postmarked within 15 days after the actual date of initial startup unless a more stringent time frame is required by regulation. The request should be made using the appropriate Title V modification form.

K. GENERAL CONDITIONS

Condition Number	Conditions
K.1	The permittee shall pay permit fees to the Department in accordance with the requirements of S.C. Regulation 61-30, Environmental Protection Fees.
K.2	In the event of an emergency, as defined in S.C. Regulation 61-62.1, Section II.L, the owner or operator may document an emergency situation through properly signed, contemporaneous operating logs, and other relevant evidence that verify: 1. An emergency occurred, and the owner or operator can identify the cause(s) of the emergency; 2. The permitted source was at the time the emergency occurred being properly operated; 3. During the period of the emergency, the owner or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and 4. The owner or operator gave a verbal notification of the emergency to the Department within 24 hours of the time when emission limitations were exceeded, followed by a written report within 30 days. The written report shall include, at a minimum, the information required by S.C. Regulation 61-62.1, Section II.J.1.c.i through viii. The written report shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
K.3	(S.C. Regulation 61-62.1, Section II.O) Upon presentation of credentials and other documents as may be required by law, the owner or operator shall allow the Department or an authorized representative to perform the following: 1. Enter the facility where emissions-related activity is conducted, or where records must be kept under the conditions of the permit. 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. 3. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit. 4. As authorized by the Federal Clean Air Act and/or the S.C. Pollution Control Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
K.4	(S.C. Regulation 61-62.1, Section II.J.1.a) No applicable law, regulation, or standard will be contravened.
K.5	(S.C. Regulation 61-62.1, Section II.J.1.e) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to S.C. Regulation 61-62.1 or with the terms of any approval to construct, or who commences construction after the effective date of S.C. Regulation 61-62.1 without applying for and receiving approval hereunder, shall be subject to enforcement action.

L. EMISSIONS INVENTORY REPORTS - RESERVED

ATTACHMENT - Emission Rates for Ambient Air Standards

New-Indy Catawba LLC
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The emission rates listed herein are not considered enforceable limitations but are used to evaluate ambient air quality impact. Until the Department makes a determination that a facility is causing or contributing to an exceedance of a state or federal ambient air quality standard, increases to these emission rates are not in themselves considered violations of these ambient air quality standards (see Ambient Air Standards Requirements).

STANDARD NO. 2 – AMBIENT AIR QUALITY STANDARDS EMISSION RATES (LBS/HR)						
Emission Point ID	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**NO_x**	**CO**	**Lead**
CAUST / 2700	1.34	0.64	--	--	--	--
FUTAMU / 9900	0.98	0.98	0.076	19.33	10.62	6.82E-05
FUTASBA / 2904	0.88	0.88	0.410	3.00	1.341	--
FUTBP / 5200	--	--	--	--	60.32	--
FUTCB1 / 2610S1	57.23	50.57	865.09	123.02	234.93	6.26E-02
FUTCB2 / 2610S2	96.11	85.16	1539.71	219.1	298.42	7.12E-02
FUTHOLD1 / 2902	--	--	0.670	10.08	2.17	--
FUTHOLD2 / 2903	--	--	0.710	5.18	2.30	--
FUTLK2 / 2723	2.24	1.86	39.37	86.51	24.29	3.13E-04
FUTNCG1 / 2610S1	--	--	641.28	71.03	10.32	--
FUTPB1 / 2550	40.04	30.11	752.39	104.76	31.51	1.03E-02
FUTPM1 / 2000	0.93	0.66	2.763	10.08	4.01	4.65E-04
FUTPM2 / 4600	1.26	0.91	3.716	13.43	5.188	6.20E-04
FUTPM3 / 4100	1.07	0.8	2.763	9.97	4.01	4.62E-02
FUTRF2 / 2505	12.38	9.65	792.08	112.70	56.92	1.01E-02
FUTRF3 / 5105	22.37	17.43	792.08	146.03	330.96	1.01E-02
FUTST2 / 2510	7.62	7.62	0.240	0.937	--	1.72E-04
FUTST3 / 5110	13.77	13.77	0.430	1.70	--	3.11E-04
FUTTTPA / 2905	0.88	0.88	0.410	3.00	1.341	--
EG / 2906	0.036	0.036	0.0004	0.63	20.3	**--**
RCDR	0.6	--	--	--	--	--
Pulp Dryer / 2100	0.054	0.054	--	--	--	--